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10/789,949	02/27/2004	Johannes Lauterbach	000005-006500US	5789
⁵⁸⁷³⁵ Fountainhead L	7590 03/28/200 aw Group P.C.	EXAMINER		
900 LAFAYET SUITE 509			KISS, ERIC B	
SANTA CLARA, CA 95050			ART UNIT	PAPER NUMBER
			2192	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/789,949	LAUTERBACH ET AL.				
Office Action Summary	Examiner	Art Unit				
	Eric B. Kiss	2192				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 31 De	ecember 2007.					
	action is non-final.					
<i>;</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
·— · · · · · · · · · · · · · · · · · ·	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-20</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers	·					
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some color None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

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DETAILED ACTION

1. The reply filed December 31, 2007, has been received and entered. Claims 1-20 are pending.

Response to Amendment

2. Applicant's amendment to claim 14 appropriately addresses the rejection of claims 14-17 under 35 U.S.C. § 101, and accordingly this rejection is withdrawn.

Response to Arguments

3. Applicant's arguments filed December 31, 2007, have been fully considered but they are not persuasive.

Regarding the rejection of claims 12 and 17 under 35 U.S.C. § 112, the trademarks VBA, JAVA, and JAVASCRIPT are used to describe particular programming languages. If the trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of the 35 U.S.C. 112, second paragraph. *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982); MPEP § 2173.05(u). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. MPEP § 2173.05(u). In fact, the value of a trademark would be lost to the extent that it became descriptive of a product, rather than used as an identification of a source or origin of a product. *Id.* Thus, the use of a trademark or trade name in a claim to identify or describe a material or product would not only render a claim indefinite, but would also constitute an improper use of the trademark or trade name. *Id.*

Regarding the rejection of claim 20 under 35 U.S.C. § 101, despite applicant's assertion that claim 20 recites a statutory machine, the examiner notes that no hardware elements are

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explicitly recited nor are any hardware specifically required by the mere use of the phrase "computer system". The "computer system" is recited as comprising two means-plus-function elements, both of which can be reasonably interpreted in view of the specification as software.

To overcome the § 101 rejection, the examiner suggests amending claim 20 to additionally recite a processor and a memory.

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Regarding applicant's arguments on pp. 8-11, the examiner maintains that Sun2001 discloses the elements recited in applicant's claims. Sun2001 does disclose a runtime object (see, e.g., sections JSP.1.2.4 (describing the translation and execution steps) and JSP.8.1 (a JSP page is represented at execution time by a JSP page implementation object and is executed by a JSP container). Further, the templates and element placeholders discussed in sections JSP.1.1, JSP.1.2, JSP.2.3, and JSP.2.13 of Sun2001 correspond to the structure of the JSP page implementation object in that they form part of the description of how a JSP page processes a request to create a dynamic response. Furthermore, the tag libraries of Sun2001 contain classes including, for example, TagExtraInfo, tag handler, and event listener classes (see, e.g., section JSP.7.2.2). The replacement of instructions in a JSP page with actions specified by tags from the tag library is described in detail in section JSP.7.1 of Sun2001 (e.g., section JSP.7.1.2.1 (the JSP page implementation class instantiates a tag handler object, or reuses an existing tag handler object, for each action in the JSP page); JSP.7.2 (A tag library is a collection of actions that encapsulate some functionality to be used from within a JSP page. A tag library is made available to a JSP page through a taglib directive that identifies the tag library via a URI. The URI is associated with a Tag Library Description (TLD) file and with tag handler classes).

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Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 12 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12 and 17 contain the trademarks/trade names VBA, JAVA, and JAVASCRIPT. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademarks/trade names are used to identify/describe particular programming languages and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 20 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se. In re Warmerdam*, 33 F.3d 1354, 1361, 31 USPQ2d 1754, 1760 (claim to a data structure per se held nonstatutory).

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. *See*, *e.g.*, *In re Warmerdam*, 33 F.3d 1354, 1361, 31 USPQ2d 1754, 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings per se, *i.e.*, the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer

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programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. *See In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPO2d 1031, 1035.

Claim 20 recites a "computer system" comprising a series of means that can be reasonably interpreted as software. (*See* Specification at p. 17, lines 8-16.) Accordingly, claim 20 appears to merely set forth functional descriptive material *per se*, which is nonstatutory.

8. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. §101 (non-statutory) above are further rejected as set forth below in anticipation of Applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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10. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Eduardo Pelegrí-Llopart, ed., "JavaServer Pages™ Specification," Version 1.2, August 27, 2001, Sun Microsystems, Inc. (hereinafter "Sun2001").

Regarding claim 1, *Sun2001* discloses a method for providing a library that is adapted to be instantiated into a runtime object (*see*, *e.g.*, *Sun2001* at JSP.7.2 (describing tag libraries)), the method comprising:

providing a template that corresponds to the structure of the runtime object with element placeholders for elements and with attribute placeholders for attributes (*see*, *e.g.*, *Sun2001* at sections JSP.1.1 and JSP.1.2 (describing templates, and adding dynamic data to template data); section JSP.2.13 (describing handling of attributes));

providing classes that form the library, wherein the classes correspond to the elements and the classes have replacement instructions for the placeholders, with the replacement instructions activated upon instantiating into the runtime object (*see*, *e.g.*, *Sun2001* at Chapter JSP.7 (describing tag libraries)).

Regarding claim 2, *Sun2001* further discloses the template includes element placeholders having start portions and end portions differentiated by tag types (*see*, *e.g.*, *Sun2001* at sections JSP.7.1.2.1 and JSP.7.1.3 (describing tag handlers and various tag types)).

Regarding claim 3, *Sun2001* further discloses the template includes element placeholders having element identification components belonging to the start portions and the end portions (*see*, *e.g.*, *Sun2001* at sections JSP.7.1.2.1 and JSP.7.1.3 (describing tag handlers and various tag types)).

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Regarding claim 4, *Sun2001* further discloses the element placeholders include element placeholders for a root element and for a branch element, with the start portions and the end portions of the branch element placed between the start portions and the end portions of the root element (*see*, *e.g.*, *Sun2001* at sections JSP.7.1.3 (describing tag handlers, including branches within tags (conditionals and iteration tags))).

Regarding claim 5, *Sun2001* further discloses the template includes the attribute placeholders placed between the start portions and the end portions of the element placeholders (*see*, *e.g.*, *Sun2001* at sections JSP.7.1.2.1 and JSP.7.1.3 (describing tag handlers accessing attributes of tags)).

Regarding claim 6, *Sun2001* further discloses the template includes code portions in the language of the runtime object placed between the start portions and the end portions of the element placeholders (*see*, *e.g.*, *Sun2001* at section JSP.7.1.3 (describing tag handlers and associated actions (code portions))).

Regarding claim 7, *Sun2001* further discloses, in providing the template, single placeholders that represent a plurality of elements include a plurality indicator for indicating that the single placeholders represent a plurality of elements (*see*, *e.g.*, *Sun2001* at sections JSP.7.1.3.4 and JSP.7.1.3.5 (describing iterations)).

Regarding claim 8, *Sun2001* further discloses, in providing classes, the attribute placeholder changes a form of tags from tags of a first type into tags of a second type (*see*, *e.g.*, *Sun2001* at section JSP.7.1.2 (describing the translation of tags from XML to a JSP page implementation)).

Regarding claim 9, *Sun2001* further discloses providing classes comprises using XML-techniques (*see*, *e.g.*, *Sun2001* at section JSP.7.1 (a tag library is described via the tag library descriptor (TLD), and XML document)).

Regarding claim 10, *Sun2001* further discloses providing classes comprises organizing the classes in an abstract syntax tree (AST) (defined by applicant as, "any computer-internal hierarchy representation of an object, a class or a library," (Specification at p. 5, lines 4-5). (*see*, *e.g.*, *Sun2001* at section JSP.7.1.3.6 (describing a nested structure of actions to describe scoping)).

Regarding claim 11, *Sun2001* further discloses the template and classes are provided such that the library is adapted to be instantiated into a runtime object selected from the group consisting of application class file, application project file, common registry, machine specific registry, business component, and website layout (*see*, *e.g.*, *Sun2001* at section JSP.1.1 (describing general uses of JSP, including web applications (business component and website layout))).

Regarding claim 12, *Sun2001* further discloses the template and the classes are provided such that the library is adapted to be instantiated into a runtime object in a language selected from the group consisting of VBA, HTML, C++, C, Java, JavaScript, XML, and WML (*see*, *e.g.*, *Sun2001* at section JSP.1.1).

Regarding claim 13, *Sun2001* further discloses each element has associated attributes (*see*, *e.g.*, *Sun2001* at sections JSP.7.1.2.1 and JSP.7.1.3 (describing tag handlers accessing attributes of tags)), further comprising:

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identifying data for the attributes associated with each of the elements (*see*, *e.g.*, *Sun2001* at sections JSP.7.1.2.1 and JSP.7.1.3 (describing tag handlers accessing attributes of tags)); and instantiating the classes by activating the replacement instructions to replace the attribute

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placeholders with the data (*see*, *e.g.*, *Sun2001* at sections JSP.7.1.2.1 and JSP.7.1.3 (describing tag handlers accessing attributes of tags)).

Regarding claim 14, Sun2001 discloses an article of manufacture comprising a computer-usable medium storing computer-readable program code for causing a processor to perform operations (*see*, *e.g.*, *Sun2001* at section JSP.2.1.3 (describing generally execution involving a server and client, necessarily requiring processors and memory)) comprising:

providing a runtime object having elements and attributes, with each element having associated ones of the attributes (*see*, *e.g.*, *Sun2001* at sections JSP.2.1.3 (describing translation and execution of tags) and JSP.7.1.3 (describing tag handlers accessing attributes of tags));

pre-assembling the runtime object using classes in a library, wherein the classes correspond to the elements, the classes include replacement instructions for attribute placeholders, and the classes are based on a template that corresponds to a structure of the runtime object, with the template including element placeholders for the elements and attribute placeholders for the attributes (*see*, *e.g.*, *Sun2001* at sections JSP.1.1 and JSP.1.2 (describing templates, and adding dynamic data to template data); section JSP.2.13 (describing handling of attributes); Chapter JSP.7 (describing tag libraries));

identifying data for the attributes associated with each of the elements (see, e.g., Sun2001 at section (describing tag handlers accessing attributes of tags)); and

instantiating the classes by activating the replacement instructions to replace the attribute placeholders with the data (*see*, *e.g.*, *Sun2001* at sections JSP.2.1.3 (describing translation and execution of tags) and JSP.7.1.3 (describing tag handlers accessing attributes of tags)).

Regarding claim 15, *Sun2001* further discloses the template includes element placeholders having start portions and end portions and the attribute placeholders are placed between the start portions and the end portions of the element placeholders (*see*, *e.g.*, *Sun2001* at sections JSP.7.1.2.1 and JSP.7.1.3 (describing tag handlers accessing attributes of tags)).

Regarding claim 16, *Sun2001* further discloses the template includes code portions in the language of the runtime object placed between the start portions and the end portions of the element placeholders (*see*, *e.g.*, *Sun2001* at section JSP.7.1.3 (describing tag handlers and associated actions (code portions))).

Regarding claim 17, *Sun2001* further discloses the library is adapted to be instantiated into a runtime object in a language selected from the group consisting of VBA, HTML, C++, C, Java, JavaScript, XML, and WML (*see*, *e.g.*, *Sun2001* at section JSP.1.1).

Regarding claim 18, *Sun2001* discloses a computer program stored on a computer-readable medium and comprising processor instructions for providing a library adapted to be instantiated into a runtime object (*see*, *e.g.*, *Sun2001* at sections JSP.2.1.3 (describing generally execution involving a server and client, necessarily requiring processors and memory); *Sun2001* at section JSP.7.2 (describing tag libraries)), the processor instructions comprising:

first instructions for providing a template that corresponds to a structure of the runtime object with element placeholders for elements and with attribute placeholders for attributes (see,

e.g., Sun2001 at sections JSP.1.1 and JSP.1.2 (describing templates, and adding dynamic data to template data); section JSP.2.13 (describing handling of attributes)); and

second instructions for providing classes that form the library, wherein the classes correspond to the elements and the classes have replacement instructions for the placeholders that are activated upon instantiating into the runtime object (*see*, *e.g.*, *Sun2001* at Chapter JSP.7 (describing tag libraries)).

Regarding claim 19, *Sun2001* further discloses the library is adapted to be instantiated into a runtime object selected from the group consisting of application class file, application project file, common registry, machine specific registry, business component, and website layout (describing general uses of JSP, including web applications (business component and website layout))).

Regarding claim 20, *Sun2001* discloses a computer system for providing a library adapted to be instantiated into a runtime object (*see*, *e.g.*, *Sun2001* at JSP.7.2 (describing tag libraries)), the computer system comprising:

means for providing a template that corresponds to a structure of the runtime object with element placeholders for elements and with attribute placeholders for attributes (*see*, *e.g.*, *Sun2001* at sections JSP.1.1 and JSP.1.2 (describing templates, and adding dynamic data to template data); section JSP.2.13 (describing handling of attributes)); and

means for providing classes that form the library, wherein the classes correspond to the elements and the classes have replacement instructions for the placeholders that are activated upon instantiating into the runtime object (*see*, *e.g.*, *Sun2001* at Chapter JSP.7 (describing tag libraries)).

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Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The Examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric B. Kiss/ Eric B. Kiss Primary Examiner, Art Unit 2192